

Certificate of Analysis

www.tocris.com

Product Name: NAI

Catalog No.: 7004

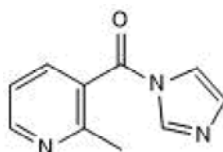
Batch No.: 1

CAS Number: 1055970-47-2

IUPAC Name: 1*H*-Imidazol-1-yl(2-methyl-3-pyridinyl)methanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₉N₃O
Batch Molecular Weight: 187.2
Physical Appearance: Cream solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: NAI

Catalog No.: 7004

Batch No.: 1

CAS Number: 1055970-47-2

IUPAC Name: 1*H*-Imidazol-1-yl(2-methyl-3-pyridinyl)methanone

Description:

Reagent for RNA SHAPE-MaP experiments in live cells. Acylates the 2'-OH in RNA, labels single stranded or flexible regions more than folded regions (SHAPE methodology). Enables analysis of RNA secondary structures at single nucleotide resolution. Exhibits greater signals with lower background than 1M7 for in vivo measurement of the RNA structure. Also more stable than 1M7 in water. β-mercaptoethanol terminates reaction. Cell permeable.

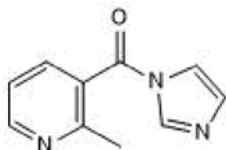
Physical and Chemical Properties:

Batch Molecular Formula: C₁₀H₉N₃O

Batch Molecular Weight: 187.2

Physical Appearance: Cream solid

Batch Molecular Structure:



References:

Lee *et al* (2017) Comparison of SHAPE reagents for mapping RNA structures inside living cells. *RNA* **23** 169. PMID: 27879433.

Kwok *et al* (2013) Determination of *in vivo* RNA structure in low-abundance transcripts. *Nat. Commun.* **4** 2971. PMID: 24336128.

Spitale *et al* (2013) RNA SHAPE analysis in living cells. *Nat. Chem. Biol.* **9** 18. PMID: 23178934.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956